760nm DFB TO-CAN datasheet

P/N ：WD76-002-A

Description

The laser diode module is a cost effective, highly coherent laser source. The chips are mounted in TO39 can. Wavelength tuning can be achieved via laser current and temperature. Tuning packaged with TEC and PD built in.

Features

Very high spectral purity ;
Narrow linewidth typically ＜ 3 MHz ;
Excellent reliability;
Wide variety of packaging options;
Customer-specific designs available

Applications

High performance gas sensing for process and environmental control;
Precision metrology;atomic clocks;
spectroscopy;space technology

Specification： Tsub＝25°C, CW bias unless stated otherwise

ELECTRO-OPTICAL CHARACTERISTICS					
PARAMETER	Symbol	MIN	TYP	MAX	Unit
Centre Wavelength	λ	759	760	761	nm
Side Mode Suppression Ratio	SMSR	30	35	--	dB
Threshold Current	Ith	10	15	30	mA
Operating Current	Iop	--	30	50	mA
Output Power	Po	--	5	--	mW
Temperature Tunning Coefficient	Ct	0.04	0.05	0.07	nm/K
Forward Voltage	Vf	--	--	2	V
Slow axis(FWHM)	/	35	35	40	degrees
Fast axis(FWHM)	/	50	60	65	degrees
Emitting area	W x H	1.2 x 1.3	1.5 x 2	2 x 2.2	um
B constant of Rth	B	3800	3930	4000	K
Thermistor Resistance	Rt	9.7	10	10.3	kΩ

Environment Specifications

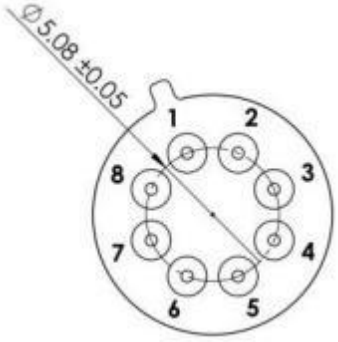
Item	Min	Typ	Max	Unit
Operating Temperature	-10	--	50	℃
Storage Temperature	-40	--	80	℃

TEC Characteristics@25°C

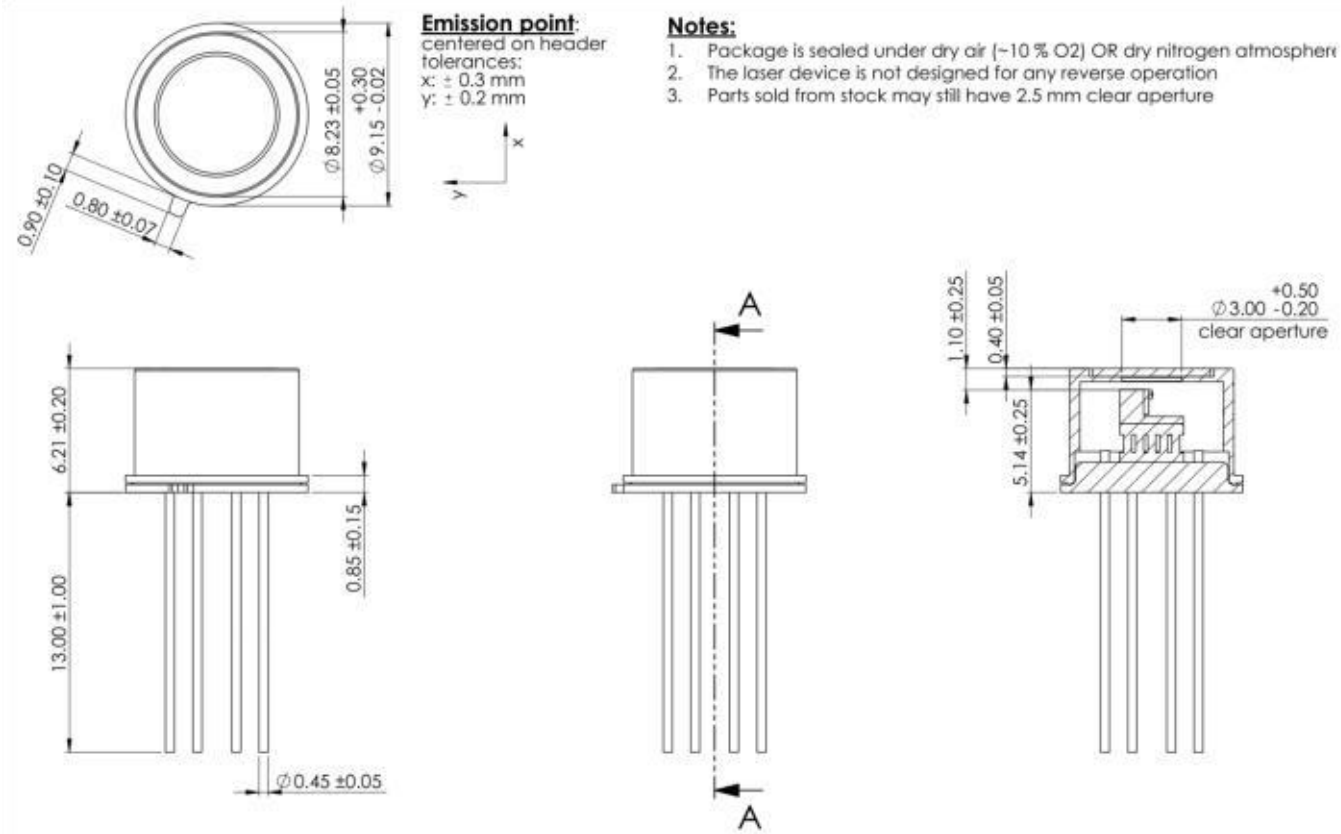
PARAMETER	Symbol	MIN	TYP	MAX	Unit
TEC Current	Imax	--	--	0.8	A
TEC Voltage	Vmax	--	--	1.4	V
TEC Power(@ΔT =0K)	Qmax	--	--	0.68	W
TEC Capacity(@Q=0W)	ΔTmax	--	--	67	K

Pin Description

Pin	Description
1	LD Anode(+)
2	LD Cathode (-)
3	TEC (-)
4	TEC (+)
5	THERMISTOR
6	THERMISTOR
7	N/C
8	N/C



Mechanical Dimension



Unit: mm